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DRAFT ENVIRONMENTAL ASSESSMENT

BLUE RIDGE MOUNTAIN ELECTRIC MEMBERSHIP CORPORATION PROPOSED SUBSTATION

**Chatuge Reservoir
Towns County, Georgia**

PREPARED BY:
TENNESSEE VALLEY AUTHORITY

OCTOBER 2008

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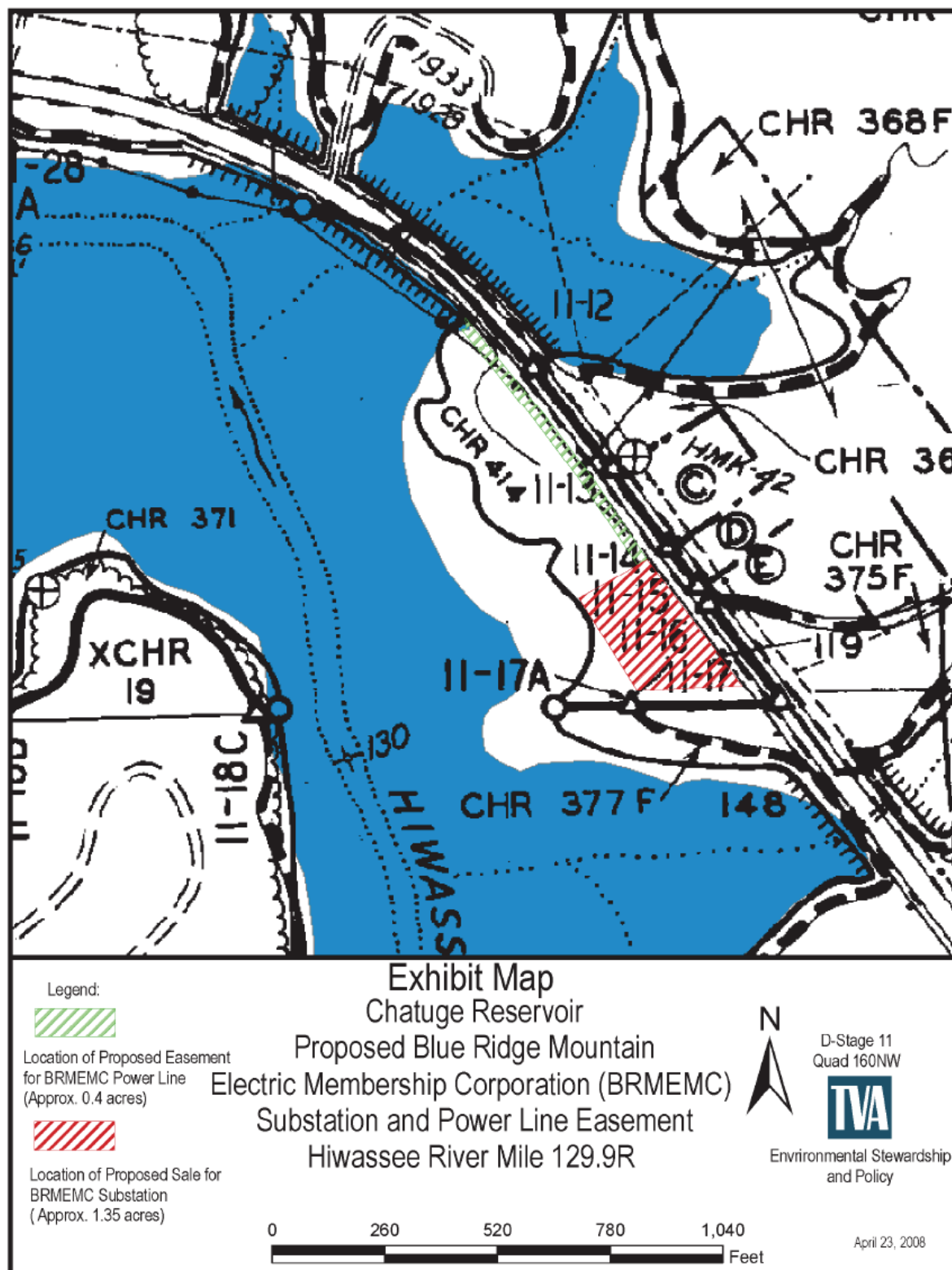
OCTOBER 2008

The Proposed Decision and Need

Blue Ridge Mountain Electric Membership Corporation (BRMEMC) is planning to construct a new electrical substation in Hiawassee, Towns County, Georgia. BRMEMC is experiencing increased demands for electric power on its existing transmission line system. Currently, BRMEMC operates one other substation, Woodsgrove, in the Hiawassee area. The Woodsgrove Substation services 8,328 customers and has been operating above firm capacity since February 2004. The firm capacity of the Woodsgrove Substation is 20 megawatts (MW) and maximum capacity is 40 MW. On January 3, 2008, the electrical load reached 32.4 MW. With an estimated 5.4 percent yearly increase in electric demand, BRMEMC anticipates that the demands will exceed the transmission line system's capacity in June 2009. The future reliability of electric power in the cities of Hiawassee and Young Harris and the Towns County, Georgia, area would be affected if a new substation were not constructed to meet the increased electric power demands.

In March 2008, BRMEMC requested that Tennessee Valley Authority (TVA) sell via public auction approximately 1.4 acres of TVA Tract XCHR-12R (also known as Parcel 52) on Chatuge Reservoir in accordance with Section 31 of the *TVA Act of 1933*, as amended. This property would be used as the site for the construction of the new substation. BRMEMC also requested that TVA grant a permanent easement of approximately 0.4 acre for the construction of a new 69-kilovolt (kV) transmission line (see Figure 1). In addition, TVA is considering approval under Section 26a of the *TVA Act of 1933*, as amended, for fill material that would be placed within the floodplain because of the substation construction.

In this environmental assessment (EA), TVA examines the potential impacts of declaring as surplus and selling at public auction approximately 1.4 acres of property, of granting BRMEMC a permanent easement and approval of a Section 26a permit, and of the resulting construction and operation of the substation and new transmission line. BRMEMC also plans to upgrade an existing transmission line to accommodate higher voltage lines from the new substation. The cumulative impacts of the upgraded transmission line in its entirety are addressed in the EA. If TVA later determines that the upgraded transmission line would require Section 26a and/or land use approvals, TVA would review, as appropriate, the direct and indirect impacts of the relevant portion of the line at that time.



Other Pertinent Environmental Reviews

TVA is developing a Mountain Reservoirs Land Management Plan (Plan) to guide land use and resource management decisions concerning TVA-managed public lands located along nine mountain reservoirs: Apalachia, Blue Ridge, Chatuge, Fontana, Hiwassee, Nottely, Ocoee 1 (Parksville), Ocoee 2, and Ocoee 3. In the planning process, TVA will identify the most suitable and appropriate use for each parcel of TVA-managed public land along these reservoirs for the next 10 years. The anticipated effects of implementing the Plan were described in a draft environmental impact statement (EIS), which was released for public comment in August 2008 (TVA 2008).

A public scoping comment period was conducted from June 1 through June 30, 2007. Comments received on the land management planning process and on the environmental issues to be addressed in the associated EIS were summarized in a report published in September 2007. During the public scoping comment period, BRMEMC, the City of Hiwassee, the Georgia Department of Natural Resources (GADNR), and Towns County submitted comments to TVA regarding the use of Parcel 52. BRMEMC requested that a portion of this parcel be made available for a new substation. The City of Hiwassee requested use of this parcel as a city park. GADNR suggested that this parcel be designated for deepwater boat access. Towns County requested the use of this parcel, along with two other parcels, as a developed recreation area.

Necessary Permits and Public Involvement

BRMEMC has requested in fee approximately 1.4 acres of TVA property. To accommodate this request, TVA would declare this property surplus and conduct a Section 31 public auction. A permanent easement has been requested by BRMEMC for approximately 0.4 acre of TVA property. The permanent easement would allow for the construction of a new transmission line. Approval under Section 26a of the *TVA Act of 1933*, as amended, is required for the construction of any obstructions across, along, or in the Tennessee River or its tributaries. Approval of a Section 26a permit would be necessary for the placement of fill material within the floodplain. BRMEMC's application and supporting materials are located in Attachment A.

BRMEMC may also be required to obtain other local and/or state permits or licenses. If the substation construction exceeds 1 acre, BRMEMC would be required to obtain a storm water construction permit from the State of Georgia. In addition, TVA would require BRMEMC to provide a copy of its Spill Prevention, Control, and Countermeasure Plan prior to beginning construction.

The proposed action was the subject of a public notice issued by TVA on April 29, 2008, seeking scoping comments during a 30-day public comment period. The comments received during this period and a copy of the public notice are located in Attachment B. The public notice was placed on the TVA Web site on April 29, 2008. The public notice was also placed in the *Hiwassee Towns Herald* and the *Hiwassee Towns Sentinel* newspapers on May 1, 2008. TVA received public comments pertaining to the BRMEMC proposal from 12 stakeholders and one county commissioner. Towns County Homeowners Association (TCHA) submitted two letters on May 31, 2008, with the following subjects and dates: "Comments in response to the TVA notification about BRMEMC application for 2-Acre Tract," dated May 31, 2008, and "Development of Enforcement Procedures for Watercraft Usage on Lake Chatuge," dated March 24, 2008. The comment dated March 24, 2008, was originally submitted as a comment to the Plan and has been

addressed generally in the draft EIS because the BRMEMC proposal does not include the use of watercraft. The scoping comments pertaining to the BRMEMC proposal were used to identify potential impacts. A summary of all public scoping comments pertaining to the BRMEMC proposal and TVA's responses are located in Attachment B.

The draft EIS associated with the draft Plan was released for public comment on August 15, 2008. Stakeholders could provide comments via TVA's Web site, e-mail, and telephone. In addition, an open house-style public meeting for the Plan and draft EIS was held on August 27, 2008, at the Blairsville Campus of North Georgia Technical College. Stakeholders could provide written comments during the public meeting. As of September 29, 2008, a total of 128 stakeholders commenting on the Plan and draft EIS had provided comments pertaining to the BRMEMC proposal, and these comments were used to identify potential impacts associated with the substation. The comments were very similar to, and highlighted many of the same potential impacts as, those comments received during the BRMEMC public scoping comment period. A transcribed version of these comments is located in Attachment C.

Comments submitted during the BRMEMC public scoping period included concerns regarding electric and magnetic fields (EMFs), floodplains, land use, recreation, socioeconomics, and visual resources. Most comments pertained to either land use or visual resources. Specifically, those stakeholders commenting on land use questioned whether BRMEMC had reviewed alternative locations for the substation and whether the placement of a substation on reservoir property would conflict with future uses of this parcel. As described in the Alternatives section, BRMEMC evaluated five alternative locations on private property and two alternative locations on TVA property.

BRMEMC chose Parcel 52 as the preferred location because the substation would be located in a commercial area as opposed to a residential neighborhood, near existing transmission lines and BRMEMC's electric load center. Use of Parcel 52 would require very little site preparation in order to construct the substation, and the amount of transmission line needed to serve Parcel 52 would be less than for other alternative sites, resulting in a lower overall cost to BRMEMC. The construction of a substation and new transmission line within Parcel 52 would not conflict with existing or future potential use on the remainder of the parcel. As previously mentioned, TVA is currently developing a land management plan for Chatuge Reservoir and is considering several land use allocations for Parcel 52. The public has the opportunity to provide input to TVA as to the most appropriate land use for the remaining 9.4 acres of Parcel 52 during the comment period for the draft EIS and Plan from August 15 to October 29, 2008. Stakeholders commenting on visual resources stated that the substation would impact the aesthetics of the area. As described in the Visual Resources subsection, BRMEMC would offset potential impacts to visual resources by planting a vegetative screen surrounding the substation of mixed evergreen and deciduous shrub species with a 100 percent survival rate for one year.

The Plan comments received as of September 29, 2008, pertaining to the BRMEMC proposal included concerns regarding floodplains, land use, recreation, socioeconomics, and visual resources. Most comments contained concerns about recreation, visual resources, or property values. Most stakeholders were opposed to the BRMEMC request and suggested that Parcel 52 be allocated for public recreation, preferably soccer fields. As mentioned in the Recreation subsection of this EA, the construction of the proposed substation and transmission lines would not preclude or significantly affect potential recreational uses that would otherwise be considered by TVA on Parcel 52. Stakeholders

commenting on visual resources were concerned with the aesthetic impact of the substation being located at the entrance to the city of Hiawassee. As mentioned in the Alternatives and Visual Resources subsections, BRMEMC would offset potential impacts to visual resources by constructing an 8-foot-high chain link fence with dark green vinyl slats and planting a vegetative screen surrounding the substation of mixed evergreen and deciduous tree and evergreen shrub species with a 100 percent survival rate for one year. Stakeholders commenting on land values were concerned about a potential decline in value due to the construction of the substation. As discussed in the Socioeconomics subsection of this EA, the location of the substation in a commercial area would avoid intruding directly on residential areas, decreasing any likelihood of impacts on property values.

The proposed action was reviewed by the State of Georgia, pursuant to Executive Order (EO) 12372 on Intergovernmental Review of Federal Programs. The comments submitted by the State of Georgia along with a copy of EO 12372 are located in Attachment D. The State of Georgia concluded, "This proposal has been found to be consistent with those state or regional goals, policies, plans, fiscal resources, criteria for Developments of Regional Impact (DRI), environmental impacts, federal executive orders, acts and/or rules and regulations with which the state is concerned."

BRMEMC has initiated a public input process to inform stakeholders of the need to construct a new substation and upgrade transmission lines. The BRMEMC public input process began after TVA's public scoping comment period ended. TVA continues to receive and evaluate additional comments received as a result of the BRMEMC public input process. TVA has concluded that no new issues have been raised thus far by the BRMEMC public input process and that the EA adequately addresses the Action Alternative.

Alternatives

The alternatives considered are the No Action Alternative and the Action Alternative. Under the No Action Alternative, TVA would not provide the necessary approvals or hold a Section 31 public auction to facilitate the construction of the substation and new transmission line. Under the Action Alternative, TVA would provide the necessary approvals and conduct a Section 31 public auction to facilitate the construction of the substation and new transmission line.

Under the No Action Alternative, TVA would not sell at public auction the approximately 1.4 acres of land that would be used to construct a substation nor would TVA grant to BRMEMC a 0.4-acre permanent easement for the construction of a new transmission line. Furthermore, TVA would not approve a Section 26a permit for the placement of fill material within the floodplain. To ensure future reliability of electric power in the cities of Hiawassee and Young Harris and Towns County, BRMEMC would need to consider other locations for the construction of a new substation and transmission line. An alternative location to be considered by BRMEMC could include lands identified by Towns County Homeowners Association in cooperation with other Towns County elected officials.

Under the Action Alternative, TVA would sell at a Section 31 public auction the approximate 1.4 acres of land that would be used to construct a substation. TVA would also grant BRMEMC a 0.4-acre permanent easement for the construction of a new transmission line and would approve a Section 26a permit for the placement of fill material within the floodplain. Upon completion of BRMEMC's construction of the substation and the

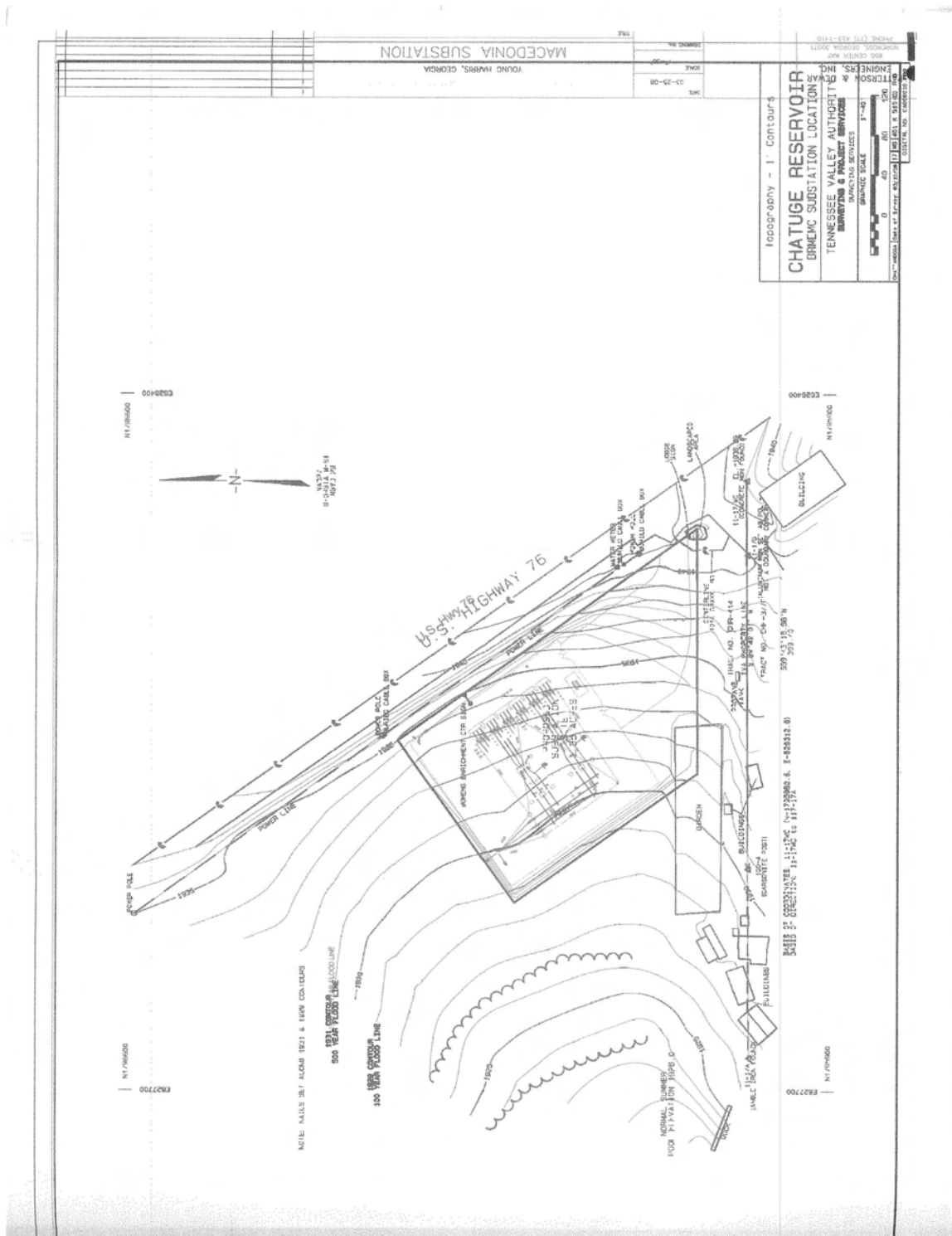
transmission line, the anticipated needs and reliability of electric power would be met for the cities of Hiawassee and Young Harris and for Towns County.

BRMEMC's conceptual design for the approximate 1.6 acres of TVA property includes the construction of an electric substation and new transmission line (see Figure 2). The 1.4 acres of property needed for the substation would be sold at a Section 31 public auction. A portion of the 1.4 acres is located in the floodplain. To construct the substation properly, BRMEMC would grade the existing soil material on site to create a level building area. This grading would result in the placement of about 21 cubic yards of fill material within the 100-year floodplain and approximately 0.2 acre-foot of fill material within the 500-year floodplain. Additional gravel rock materials needed to form the construction pad for the substation would be obtained from a local quarry—either Harrison Quarry or Mission Vulcan Quarry. Approval of a Section 26a permit would be needed for the placement of fill material within the floodplain.

BRMEMC would construct an 8-foot-high chain link fence with dark green vinyl slats around the substation. A visual buffer would be planted around the substation, and appropriate lighting would be installed. BRMEMC has stated the substation would be locked at all times, except when employees are working inside the station. BRMEMC would remotely monitor the substation with its Supervisory Control and Data Acquisition System, and weekly inspections would be performed.

BRMEMC's new 69-kV transmission line would be located on approximately 0.4 acre of TVA property. TVA would grant BRMEMC a permanent easement for the construction and maintenance of the transmission line including possible shoreline stabilization along this portion of the reservoir. The new transmission line would be located along adjacent BRMEMC and highway rights-of-way, and it would align with an existing BRMEMC 25-kV transmission line. BRMEMC plans to upgrade the existing transmission line to accommodate the higher voltage lines from the new substation.

Prior to submitting this request to TVA, BRMEMC evaluated seven possible substation locations. Five were located on private property, and two were on TVA property (see Figure 3). Sites 1, 2, 3, 4, and 7 are located on private property. Sites 5 and 6 are located on TVA property. Site 1 is located approximately 1.85 miles southeast of Parcel 52. This property with minimum improvements would meet the needs of BRMEMC, but substantial improvements to transmission lines would need to occur in order to connect to a substation at this location. Therefore, Site 1 was not financially feasible to BRMEMC. In addition, the current property owner preferred not to sell any property at this time.



Site 2 is located approximately 1.66 miles southeast of Parcel 52. This property, with substantial improvements, would meet the needs of BRMEMC; however, the current owner preferred not to sell any property at this time. Site 3 is located approximately 1.09 miles southeast of Parcel 52. As with Site 2, this property would require substantial improvements to meet the needs of BRMEMC. However, the current property owner preferred not to divide the property for partial sale, and purchasing the entire tract of property was not financially feasible for BRMEMC. Site 4 is located approximately 0.76 mile southeast of Parcel 52. Because BRMEMC would need to conduct extensive site preparation to construct the substation, Site 4 was not a financially feasible alternative location. Site 7 is located 1.66 miles southeast of Parcel 52. With substantial improvements, this property would meet the needs of BRMEMC, and the current owner has agreed to sell a portion of the property. However, the cost of acquiring the property would not be financially feasible for BRMEMC.

In addition to the alternative private property locations, BRMEMC also considered the use of a 2-acre portion of TVA Parcel 51 (Site 6). In a letter dated, May 30, 2007, BRMEMC stated that a portion of either Parcel 51 or 52 might be acceptable for the substation. After further review, BRMEMC determined that extensive site preparation would need to occur to construct the substation on Parcel 51. Therefore, Parcel 51 was not a feasible alternative location.

BRMEMC chose Site 5 (Parcel 52) as the preferred location because the substation would be located in a commercial area rather than a residential neighborhood and because the site is near existing transmission lines and BRMEMC's load center. Parcel 52 would require minor site preparation and was the most financially feasible location.

Affected Environment and Evaluation of Impacts

This property is located in Towns County, Georgia, at Hiwassee River Mile 129.9 along the right-descending bank. The physical areas addressed here include the footprints of the substation and new transmission line. Under the No Action Alternative, TVA would not sell at public auction the approximately 1.4 acres of land that would be used to construct a substation nor would TVA grant to BRMEMC a 0.4-acre permanent easement for the construction of a new transmission line. Moreover, TVA would not approve a Section 26a permit for the placement of fill material within the floodplain. Under the Action Alternative, TVA would sell at a Section 31 public auction the approximate 1.4 acres of land that would be used to construct a substation. TVA would also grant BRMEMC a 0.4-acre permanent easement for the construction of a new transmission line and would approve a Section 26a permit for the placement of fill material within the floodplain. Upon BRMEMC's construction of the substation and the transmission line, the anticipated needs and reliability of electric power would be met for the cities of Hiwassee and Young Harris and for Towns County.

TVA prepared a categorical exclusion checklist (CEC) to document the environmental review of the substation and new transmission line. A portion of the information gathered in the CEC was used in preparation of this EA. The CEC is incorporated herein by reference and is provided as Attachment E.

Because of the nature of the project, TVA has determined that adoption of the Action Alternative would not result in waste stream generation or alteration involving air or solid or special wastes. Likewise, TVA has determined there would be no impacts to navigation, migratory bird populations, drinking water supply, and minority or low-income populations.

Construction of the substation and new transmission line would be an insignificant threat to groundwater and a minimal risk for the generation of *Resource Conservation and Recovery Act* (RCRA) hazardous waste, provided BRMEMC complies with 40 CFR Part 112 and installs secondary containment surrounding the substation. Construction of the substation and new transmission line would also create a transient and temporary impact on traffic and noise. The construction traffic and potential for off-site noise impacts would exist for a limited time (from March to September 2009) and would be limited to normal business hours. Therefore, the potential impacts to traffic and noise would be minor.

Land Use

On Chatuge Reservoir, TVA initially purchased 3,557 acres of land above the normal summer operating pool. Of the acreage originally purchased, TVA has sold about 629 acres (i.e., approximately 17 percent). Most of these sale parcels are currently developed as residential areas, and a few have been developed as recreation areas. TVA transferred 1,161 acres to state or federal agencies for public use.

TVA owns approximately 52 percent of the total 128 miles of shoreline on Chatuge Reservoir. Forty-eight percent of this shoreline was never owned by TVA; TVA only purchased flowage easements along this shoreline. Approximately 57 percent of the shoreline is available for residential development, most of which is on private shoreline. TVA estimates that about 74 percent of the shoreline available for residential development is currently developed with residential subdivisions.

Parcel 52 (also known as TVA Tract No. XCHR-12R) is a 9.4-acre tract located in Towns County near the city of Hiawassee. About 54 percent of Towns County land is in the Chattahoochee National Forest (U.S. Forest Service 2007). In recent years, development has increased on the privately owned land in both counties. Land use data for Towns County (Natural Resources Spatial Analysis Laboratory 2007) show that from 1974 to 2005, high-intensity development increased from 36 to 205 acres, and low-intensity development increased from 1,332 to 6,793 acres. About 92,000 acres (approximately 85 percent) of the county remained in forest in 2005.

The land use of Parcel 52 consists primarily of an open field that is currently maintained in fescue under an agricultural license. The land use adjacent to the property includes a recreational-vehicle community directly to the south and commercial development directly across U.S. Highway (US) 76 to the east. Directly across the reservoir to the west, the land use consists of a residential subdivision.

Under the No Action Alternative, TVA would not sell the 1.4-acre portion of Parcel 52 or grant a 0.4-acre easement for the transmission line. The land use would remain consistent with the remainder of the parcel. Therefore, there would be no impacts to land use. Under the Action Alternative, TVA would sell 1.4 acres at public auction for potential use as a substation, and TVA would provide an easement to BRMEMC over 0.4 acre for a new transmission line. A substation would be generally compatible with the existing land uses along the US 76 corridor in the area. Therefore, implementing the Action Alternative would have no significant impact on land use.

Recreation

The construction of a substation and new transmission line within Parcel 52 would not conflict with the existing or future potential recreational use on the remainder of the parcel. The Mountain Reservoirs Land Management Plan is currently under development, and

various land use allocations for Parcel 52 are being considered. The purpose of the land planning process is to allocate TVA parcels to a type of land use. Currently, Parcel 52 is managed for uses consistent with Natural Resource Conservation, such as agriculture and dispersed recreational use (primarily bank fishing). Alternatively, Parcel 52 is also suitable for and capable of some Developed Recreation uses. The public has an opportunity via the draft EIS and Plan public comment period to provide input to TVA as to the most appropriate land use for the remainder of Parcel 52.

If the remainder of Parcel 52 were allocated for Developed Recreation in the final Plan that will be approved by the TVA Board of Directors, TVA would then be able to consider recreational development proposals on the parcel, provided they are consistent with TVA guidelines and policy. The TVA Land Policy states that TVA leases or easements for commercial recreation purposes shall limit the use primarily to water-based recreation designed to enhance the recreation potential of the natural resources of the river and be a stimulus for regional economic development. Future requests for recreational use would be evaluated by TVA using a phased-review process and would be subject to an environmental review as prescribed under the *National Environmental Policy Act* (NEPA).

The construction of the proposed substation and transmission line would neither preclude nor significantly affect potential recreational uses that would otherwise be considered by TVA on Parcel 52. Furthermore, there are 10 campgrounds, four commercial marinas, four public fishing piers, and three stream access sites located on Chatuge Reservoir. There are 16 recreation areas that contain at least one boat ramp, nine of which are privately operated. Five of the ramps are operated by public entities including the ramp on the Chatuge Dam Reservation that is managed by TVA. The construction of the proposed substation and transmission line on a portion of Parcel 52 would not directly, indirectly, or cumulatively impact recreation on Chatuge Reservoir.

Visual Resources

Visual resources are evaluated with respect to existing landscape character, distances of available views, sensitivity of viewing points, human perceptions of landscape beauty/sense of place (scenic attractiveness), and the degree of visual unity and wholeness of the natural landscape through the course of human alteration (scenic integrity). The value class of a landscape is determined by combining the levels of scenic attractiveness, scenic integrity, and visibility.

The proposed substation site lies on Chatuge Reservoir and near the city of Hiawassee, Georgia. The site is bordered to the north and east by US 76 and to the south and west by the remainder of Parcel 52 and Chatuge Reservoir. The topography is relatively flat and gently slopes away from the roadway toward the reservoir.

The site is visible from the highway and commercial businesses to the north and east in the foreground viewing distance (up to 0.5 mile from the observer) and from the reservoir to the southwest in the middleground viewing distance (0.5 mile to 4 miles from the observer). The site may be partially visible to a few residents to the west across Chatuge Reservoir in the foreground and middleground distances and campers to the south. Views for residents to the west would be less obscured by existing vegetation along the western boundary of the site during the winter following leaf-drop. Views available from the background viewing distance (4 miles to the horizon) are generally not available, due to topography and vegetation. The existing scenic attractiveness is common to minimal, and the existing scenic integrity is low.

Under the No Action Alternative, TVA would not sell at public auction the requested land nor would TVA grant a permanent easement or approval of a Section 26a permit. The substation and new transmission line would not be constructed on TVA property, and there would be no net change in the existing scenic value.

Under the Action Alternative, TVA would sell at public auction the requested land and grant a permanent easement and approval of a Section 26a permit. The substation construction and new transmission line would contribute to a decline in scenic attractiveness and scenic integrity in the immediate area. The substation and new transmission line would be seen in the foreground by area residents and motorists along US 76, a few residents to the west across Chatuge Reservoir, and campers to the south. However, with vegetative screening and lighting requirements as outlined below, the direct and indirect impacts to visual resources associated with the Action Alternative likely would not lower scenic class by two levels or more, the threshold of significance. There would be insignificant cumulative impacts to visual resources associated with the Action Alternative.

- A vegetative screen of mixed evergreen and deciduous shrub species would be planted at a 25-foot-minimum width around all sides of the substation. Shrubs would be 4.5 to 5 feet tall when planted and would have a mature height of 10 to 12 feet. The shrubs would be planted with a maximum spacing of 5 feet between each shrub. The vegetative screen must have a 100 percent survival rate for one year. The shrubs and trees would not be planted within 20 feet of the proposed substation gates.
- All substation, new transmission line, and associated construction lights would be fully shielded or have internal low-glare optics, such that no light would be emitted from the fixture at angles above the horizontal plane.

Floodplains

The Flood Insurance Rate Map panels for the site indicate that a portion of the tract is located within the approximate 100-year floodplain (Zone A). The 100-year flood elevation at this location is 1,929.0 (National Geographic Vertical Datum model of 1929). Based on surveyed contour data, a very small portion of the property is located within the limits of the 100-year floodplain. Construction of the substation would involve the placement of about 21 cubic yards of fill material within the 100-year floodplain to elevate the building site. The applicant evaluated alternative sites and provided documentation to support a determination of “no practicable alternative” to the proposed floodplain development. To minimize adverse impacts, all portions of the substation would be constructed above elevation 1,933.0, which would be 4 feet above the 100-year flood elevation at this location. Therefore, the project would be consistent with EO 11988.

About 0.2 acre-foot of fill material would be placed within the flood control storage zone in order to elevate all portions of the substation above the 500-year flood elevation 1,931.0. The applicant has provided information documenting the need for the placement of fill material. The amount of displaced flood control storage has been minimized while achieving the project objective. Therefore, the project would comply with the TVA Flood Control Storage Loss Guideline.

To ensure that development of the substation and new transmission line would not adversely impact floodplains and flood control, TVA would include the following (or a substantially similar) condition in the warranty deed, easement instrument, and/or Section

26a permit: You are advised that TVA retains the right to flood this area and that TVA will not be liable for damages resulting from flooding.

Prime Farmland

Prime farmland is defined by the U.S. Department of Agriculture as land that has the best combination of chemical and physical characteristics for meeting the nation's short- and long-range needs for food and fiber. It could be cultivated land, pastureland, or forestland, but it is not urban, built-up land, nor is it covered by water. Concern over the conversion of prime farmland to urban or industrial use prompted the passage of the 1981 *Farmland Protection Policy Act* (FPPA). This act requires that all federal agencies evaluate impacts to farmland prior to permanently converting the land to a nonagricultural land use. Form AD 1006, "Farmland Conversion Impact Rating," must be completed by federal agencies with assistance from the Natural Resources Conservation Service (NRCS) before action is taken. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

All of the approximate acreage in Parcel 52 being requested by BRMEMC has been classified as land of statewide importance (Bradson fine sandy loam, 2 to 10 percent slopes) and is currently under an agricultural lease. Under any action alternative including the removal of the soil's availability for food and fiber production, a Form AD 1006 must be completed by the NRCS. Although the acreage within Parcel 52 warranted completion of Form AD 1006, several factors that would require the consideration of alternative actions may be missing. Primary among these are unit size, surrounding land usage, the availability of farm support services, and distance from urban buildup. The Farmland Conversion Impact Rating of the 1.4-acre site for the proposed substation and the 0.4-acre proposed transmission line easement scored less than the 160-point threshold. A score of 160 or higher implies that the land's value for farming is high enough to recommend that it not be converted to nonfarm use. Therefore, adoption of the Action Alternative would result in insignificant direct, indirect, and cumulative impacts to prime farmlands.

Terrestrial Ecology

Animals: The site of the proposed sale of 1.4 acres and associated 0.4-acre easement is located on a portion of Parcel 52. The site has been previously modified and consists largely of mowed grasses. The habitat on this site offers little value to wildlife. Species accustomed to human development such as European starling, rock doves, and American robin can be observed at the site; no uncommon habitat exists at the proposed substation site. Species of wildlife that favor riparian habitats, including belted kingfisher, great blue herons, and green herons, may be observed along the nearby margins of Parcel 52.

Under the No Action Alternative, the substation and new transmission line would not be built on Parcel 52. Therefore, the project area would likely remain in its current condition, or it possibly would be modified to support recreational activities in the future. Both options would result in minor and insignificant direct, indirect, and cumulative impacts to wildlife or wildlife habitat. Because the site has been previously modified and offers little wildlife habitat, the adoption of the Action Alternative would result in minor and insignificant direct, indirect, and cumulative impacts to wildlife and wildlife habitat.

Plants: Parcel 52 is a 9.4-acre tract of land on Chatuge Reservoir along US 76 south of Hiawassee, Georgia (Townns County). Chatuge Reservoir is part of the Hiawassee River watershed, and Parcel 52 is located in the Broad Basin portion of the Blue Ridge ecoregion (Griffith et al. 2001). The Broad Basin region, which comprises most of the lands within the

reservoir, is drier and has lower elevations and less relief than the more mountainous Blue Ridge regions. The soils are mostly deep, well drained, and loamy to clayey Ultisols. This rolling foothills region is mostly forested with pastures and row crops found on terraces and floodplains. Much of the pasture and corn crops support local cattle, hog, or poultry operations (Griffith et al. 2001).

Three types of vegetation classes are found on Parcel 52. The parcel is dominated by herbaceous vegetation with a fringe of deciduous woodlands (forested wetlands) intergrading into shrublands (scrub-shrub wetlands) along the shore of Chatuge Reservoir. A grass/forbs habitat occurs primarily on approximately 90 percent of the parcel. Common weedy species found are Bermuda grass, Johnson grass, narrowleaf plantain, orchard grass, tall fescue, and various other broadleaved species. The remaining 10 percent of the vegetation on Parcel 52 is in the form of forested and scrub-shrub wetlands. River birch and silver maple are dominant tree species with black willow, silky dogwood, and buttonbush in the shrub layer. The herb layer is dominated by rushes (soft rush and path rush) and sedges (false hop sedge, Frank's sedge, and fox sedge), multiflora rose, Japanese honeysuckle, oriental bittersweet, common boneset, cut grass, and touch-me-not. Almost 100 percent of the vegetation on the 1.6-acre portion of Parcel 52 proposed for the substation and transmission line is comprised of the grass/forb community. There are no uncommon terrestrial plant communities, designated critical plant habitat, or otherwise noteworthy botanical areas occurring on or adjacent to Parcel 52.

Invasive exotic plant species occurring within and near the project area include Chinese privet, Japanese honeysuckle, Johnson grass, multiflora rose, oriental bittersweet, sericea lespedeza, and tree of heaven. All of these species have the potential to adversely affect the native plant communities because of their potential to spread rapidly and displace native vegetation. Essentially, the entire proposed project is on land in which the native vegetation has been extensively altered by previous land use. All of these invasive species are Rank 1 (severe threat) and are of high priority to TVA (James 2002).

Implementation of the No Action Alternative would not result in any project-related impacts to the terrestrial ecology of the region. The herbaceous and sparse woody vegetation growing along the shoreline of Chatuge Reservoir would continue to grow and be affected occasionally by stream bank erosion from water level fluctuations. However, adoption of the No Action Alternative would allow the exotic invasive species present on Parcel 52 to continue to grow and possibly spread to adjacent areas.

Under the Action Alternative, TVA would sell at public auction the requested land and grant a permanent easement and approval of a Section 26a permit. Since there are no rare terrestrial plant communities present on or adjacent to the project area, and the communities present are common and representative of the region, adoption of the proposed Action Alternative would not create adverse impacts to these resources. Therefore, implementation of the Action Alternative is expected to have insignificant direct and indirect impacts to plants. There would be no cumulative impacts to plants. Therefore, if best management practices (BMPs) (Muncy 1999) for revegetation of disturbed lands were implemented in the areas surrounding the fill, no significant direct, indirect, or cumulative impacts from the spread of invasive species would be expected as a result of implementing the proposed Action Alternative.

Wetlands

Forested and scrub-shrub fringed wetlands occur along the shoreline on Parcel 52 and are categorized as Category 2 wetlands of moderate quality according to TVA's Rapid Assessment Method for wetlands, which is a version of the Ohio Rapid Assessment Method (Mack 2001) that was specifically designed for the TVA region. Black willow, silky dogwood, and buttonbush along the shoreline grade into palustrine forest dominated by river birch and silver maple. Other wetland species present include rushes (soft rush and path rush) and sedges (false hop sedge, Frank's sedge, and fox sedge), cut grass, and touch-me-not. No wetlands are present on the 1.4-acre site of the proposed substation or the 0.4-acre proposed transmission line easement.

Under the No Action Alternative, no impacts are expected to the wetlands present on Parcel 52. The 1.4-acre substation site would not be sold, and the 0.4-acre easement would not be granted; therefore, the fringed wetlands would continue to be managed as they have been in the past.

Because no wetlands are present within the footprint of the proposed substation and transmission line easement, no direct, indirect, or cumulative impacts to wetlands are expected under the Action Alternative. Even though the fringe wetlands on Parcel 52 in the area of the proposed project are not considered high-functioning wetlands, they provide valuable shoreline habitat and should be maintained in their current condition.

Water Quality and Aquatic Ecology

Chatuge Reservoir is a headwater reservoir with no upstream impoundments that alter flow patterns and physical and chemical characteristics of runoff. An average and annual discharge (1990 to 2005) of 439 cubic feet per second results in an average water retention time in the reservoir of about 269 days. The long retention time results in Chatuge Reservoir becoming thermally stratified in the summer. Once stratification is established, oxygen in the deeper water cannot be replenished from the air or from contact with the oxygen-rich surface water. This results in low dissolved oxygen (DO) concentrations in the lower strata of the water column as DO is depleted by the natural process of decaying organic material. As part of TVA's Lake Improvement Plan, an aerating weir was constructed in November 1992 to improve minimum flow and DO levels in the releases from the dam.

Chatuge Reservoir is located in the Blue Ridge Physiographic Province. Due to the geologic characteristics of the region, streams in the watershed have naturally low concentrations of nutrients and dissolved minerals. Consequently, the reservoir has low productivity (i.e., low chlorophyll concentrations). More than 37 percent of the watershed lies within two national forests, the Nantahala National Forest in North Carolina and Chattahoochee National Forest in Georgia, affording some protection to water quality (Hiwassee River Watershed Coalition [HRWC] Inc. 2007).

Chatuge Reservoir was monitored on a biennial cycle from 1994 through 1998. After a substantial drop in the reservoir's ecological health score in 1998, monitoring has been conducted annually. For the past nine years, Chatuge Reservoir has rated "poor" every year with the exception of 2001 when it rated "fair," primarily because of improved DO conditions and lower average chlorophyll concentrations. The lack of spring rains and near record low runoff in 2001 likely reduced the amount of nutrients and organic material brought into the reservoir. As a result, chlorophyll concentrations were lower and oxygen levels in deeper strata were higher (due to less demand to decompose organic materials).

Low flows also reduce the rate at which the colder bottom water is displaced by warmer inflows, further reducing the rate of decomposition.

Since 1998, the ratings for four reservoir indicators—DO, sediment quality, bottom life, and chlorophyll—have fluctuated, but a shift in overall reservoir scores has resulted from more frequent and concurrent low ratings for these indicators. A plan was completed in 2007 to address water quality in Chatuge Reservoir (HRWC 2007). This plan was developed by the Hiwassee River Watershed Coalition in cooperation with TVA and other agencies. The Chatuge plan is based on modeling of the watershed and reservoir and recommends actions necessary to improve water quality to an ecological health score of “fair.”

Under the No Action Alternative, TVA would not sell at public auction the requested land nor would TVA grant a permanent easement or approval of a Section 26a permit. Consequently, the substation and new transmission line would not be constructed on TVA property, and there would be no change in the existing aquatic ecology or water quality.

Under the Action Alternative, TVA would sell at public auction the requested land and grant a permanent easement and approval of a Section 26a permit. The proposed development of the substation and new transmission line as designed would not impact the existing riparian vegetation. However, the substation and new transmission line could increase the amount of impervious surfaces, but with the implementation of proper BMPs and Section 26a General and Standard Conditions, the amount of pollutants entering the reservoir would not increase. Because the development of the substation is not expected to result in the removal of any riparian buffers, adoption of the Action Alternative would not affect aquatic ecology.

With the implementation of TVA’s Section 26a General and Standard Conditions (Attachment F) included within the warranty deed, the easement instrument, and/or the Section 26a permit, the direct and indirect impacts to surface water associated with the Action Alternative would be minor and temporary. There would be no cumulative impacts to surface water quality associated with the Action Alternative.

Endangered and Threatened Species and Species of Conservation Concern

Aquatic Animals: The TVA Natural Heritage database indicated that no aquatic endangered or threatened species are located in the area near Parcel 52 (NatureServe 2008). Therefore, adoption of either alternative would not affect aquatic endangered or threatened species.

Terrestrial Animals: In June 2008, the TVA Natural Heritage database indicated that no listed terrestrial animal species were reported within a 3-mile radius of the site. Bog turtles (*Glyptemys muhlenbergii*), federally listed as threatened, have been reported from a wetland approximately 11.8 miles from the site. No suitable habitat for this species occurs on the project site.

Under the No Action Alternative, the proposed transmission line and right-of-way would not be built on Parcel 52. No suitable habitat for listed species occurs on Parcel 52. Adoption of the No Action Alternative would not result in direct, indirect, or cumulative impacts to listed or uncommon terrestrial wildlife species. Due to the lack of suitable habitat for listed species on or adjacent to the project site, adoption of the Action Alternative would not result in direct, indirect, or cumulative impacts to listed animals or their habitats.

Plants: The TVA Natural Heritage database indicated there is one federally listed as endangered plant (green pitcher plant, *Sarracenia oreophila*), one state-listed as threatened plant (Manhart's sedge, *Carex manhartii*), and three champion tree species (black birch, red hickory, and silverbell) recorded from within 5 miles of the proposed substation site on Parcel 52. Current rankings of federally and state-listed species were verified through NatureServe Web site (NatureServe 2008). TVA biologists conducted a field survey in May 2006 and found no federally or state-listed species within the area of Parcel 52.

The green pitcher plant is a federally listed as endangered carnivorous species known from three populations (two in Clay County, North Carolina, and one in Towns County, Georgia). All are on shallow slopes, at about 1,500-1,800 feet elevation, and have a palustrine hydrology, fed by acidic seepage. These populations have been altered considerably by grazing, fire, cultivation, and drainage efforts. Currently the Towns County site is managed by The Nature Conservancy.

Since no known populations of endangered or threatened federally or state-listed plant species occur within the area of the substation and easement sites, no project-related impacts to rare plant species would result from adoption of the No Action Alternative. Even though federally and state-listed species are known to occur within 5 miles of the project area, none of these rare species or their habitats were observed during a field review in May 2006. Therefore, no significant direct or indirect impacts to rare plants are anticipated from the adoption of the Action Alternative. There would be no cumulative impacts associated with the Action Alternative.

In conclusion, there are no known populations or habitats to support populations of federally or state-listed as endangered or threatened species in the project area. There would be no impacts to listed species under either alternative.

Natural Areas

Parcel 52 is adjacent to Chattahoochee National Forest and is within 3 miles of three additional natural areas. No Nationwide Rivers Inventory streams or Wild and Scenic rivers are in the vicinity of Parcel 52. The Chattahoochee National Forest is managed by the U.S. Forest Service for water quality, forest products, and recreation. The forest is one of two national forests in Georgia; it covers approximately 750,000 acres in north Georgia. Towns County Park, managed by Towns County for public recreation, is located approximately 2.3 miles northwest of Parcel 52. Swallow Creek Wildlife Management Area, an approximately 20,000-acre tract managed by GADNR Game and Fish Division for big and small game hunting, hiking, camping, and fishing, is located approximately 2.8 miles southeast of Parcel 52. Reed Branch Wet Meadow, a 5-acre tract managed by The Nature Conservancy, is approximately 2.8 miles northwest of Parcel 52.

Under the No Action Alternative, TVA would not sell at public auction the requested land nor would TVA grant a permanent easement or approval of a Section 26a permit. No impacts to natural areas in the vicinity of Parcel 52 are anticipated as a result of the No Action Alternative.

Parcel 52 is situated in a commercialized area with existing transmission lines and is outside the boundary of Chattahoochee National Forest. In addition, the distance from Parcel 52 to the three additional natural areas is sufficient to avoid effect to these areas. Therefore, there would be no anticipated direct, indirect, or cumulative impacts to these natural areas resulting from adoption of the Action Alternative.

Archaeological Resources and Historic Structures

TVA contracted with TRC Inc. (TRC) to conduct an archaeological and historic structures assessment of the proposed substation site and transmission line easement area (Jenkins et al. 2008). TRC identified one previously recorded archaeological site within the easement area, and TRC recommended the site ineligible for the National Register of Historic Places (NRHP). TRC also identified 18 historic structures within a 0.5-mile radius of the substation and easement area. Seven of the historic structures are recommended ineligible for the NRHP, and the remaining 11 structures are recommended eligible for the NRHP. The visual effect to the eligible structures would not be adverse because of existing modern structures in view of the historic structures and/or vegetation screening, which protects the historic setting of the structures. TVA consulted with the Georgia State Historic Preservation Officer and the following federally recognized tribes: the Eastern Band of Cherokee Indians, the United Keetoowah Band of Cherokee Indians in Oklahoma, Cherokee Nation, the Muscogee (Creek) Nation of Oklahoma, Alabama-Coushatta Tribe of Texas, Alabama-Quassarte Tribal Town, Kialegee Tribal Town, Thlopthlocco Tribal Town, The Chickasaw Nation, Choctaw Nation of Oklahoma, Jena Band of Choctaw Indians, Shawnee Tribe, Eastern Shawnee Tribe of Oklahoma, Absentee Shawnee Tribe of Oklahoma, and the Seminole Tribe of Florida. None of the consulted parties have responded to date. TVA has determined that the project would have no adverse effect on historic properties listed in or eligible for the NRHP.

Socioeconomics

The proposed substation and transmission line would be located in Towns County, Georgia. Based on Census Bureau estimates for 2007, Towns County has a population of 10,894, a 16.9 percent increase since the 2000 Census of Population. This growth rate is slightly higher than the state rate of 16.6 percent and well above the national increase of 7.2 percent. The minority population in Towns County was 1.7 percent of the total in 2000, well below the state average of 37.4 percent and the national average of 30.9 percent. Estimated 2005 poverty levels in Towns County, at 12.1 percent, were lower than the state, 14.5 percent, and the nation, 13.3 percent. Unemployment was low in Towns County in 2007, at 3.5 percent compared to 4.4 percent statewide and 4.6 percent nationally. Per capita personal income in Towns County in 2006 was \$28,819, 89.8 percent of the state average of \$32,095, and 78.5 percent of the national average of \$36,714. Total employment in Towns County in 2006 was 6,033. Compared to the state, employment was relatively high in Construction (13.7 percent versus 6.7 statewide); Real Estate, Rental, and Leasing (7.7 percent versus 4.5 statewide); Arts, Entertainment, and Recreation (3.0 percent versus 1.5 statewide); and Accommodation and Food Services (12.2 percent versus 6.8 statewide).

Under the No Action Alternative, the proposed substation and related transmission line would not be built, and therefore, there would be no impacts from construction or operation of the substation. However, if similar facilities were not constructed elsewhere in the area, outages due to an insufficient supply of electricity would begin to occur at increasing frequencies.

Under the Action Alternative, construction of the proposed substation and related transmission line would have a small temporary positive impact on employment and income in the county. Once these facilities are completed, the local area would continue to have a reliable and adequate supply of electricity for some time, allowing the economy to continue to grow.

There are no known concentrations of disadvantaged populations in the area around the proposed substation and transmission line. The minority population share in the area is 2.4 percent, similar to the county rate of 1.7, and is not concentrated. The poverty level, according to the 2000 Census of Population, is 12.6 percent in Block Group 3, Census Tract 9603, where the proposed substation would be located, compared to 11.8 percent in the county (estimates for 2005 are not available for Town County).

No significant impact on property values would be likely, although a temporary, short-term impact could occur until the public becomes accustomed to the presence of the substation and transmission line. Vegetative screening and lighting requirements, as discussed in the subsection on Visual Resources, would contribute to avoiding any significant impact to property values. In addition, the location of the substation in a commercial area would avoid intruding directly on residential areas, decreasing any likelihood of impacts on property values.

As discussed in the subsection on Electric and Magnetic Fields (EMFs), the proposed project would have no significant impact on human health or costs of health care because the EMF levels are very low compared to background levels and to common devices found in most homes and businesses.

Electric and Magnetic Fields

BRMEMC has provided the following information to TVA in response to public comments concerning EMFs identified during the comment period. EMFs are produced by the use of electricity. Magnetic fields are produced by the flow of current in a wire or cable; whereas, electric fields are produced by voltage or the electrical "pressure" that drives the current. EMFs decrease rapidly with distance from the source. EMF levels expected from a higher voltage line than the proposed 69-kV line and EMF levels found in the home and workplace are provided in Table 1.

Table 1. Comparison of EMF Levels Found in the Home and Workplace

Device	Median EMF Level at 6 Inches From Device	Median EMF Level at 1 Foot From Device
Hair Dryers	300 mG	1 mG
Electric Razors	100 mG	20 mG
Can Openers	600 mG	150 mG
Vacuum Cleaners	300 mG	60 mG
Pencil Sharpeners	200 mG	70 mG
Computer with Color Monitor	14 mG	5 mG
115-kV Transmission Line	30 mG under the line	6.5 mG at edge of right-of-way

mG = Milligauss (one thousandth of one Gauss); Gauss is a unit used for measuring magnetic fields.

The data listed above demonstrate that the EMF levels produced from a 115-kV transmission line are much less than those produced from operating common household and office equipment.

Currently, no federal or State of Georgia standards exist for maximum EMF strengths for transmission lines. However, two states (Florida and New York) do have such regulations

for transmission lines operating at 230 kV and above. Florida has the most restrictive, being limited to 150 milligauss (mG) at the edge of the right-of-way. By modeling the proposed 69-kV line at load capacity, BRMEMC predicts an EMF level of less than 15 mG directly under the line. Furthermore, it predicts less than 8 mG at the edge of the right-of-way. These calculated field levels are far below the maximum levels set forth in the Florida regulations.

In general, the strongest EMFs around the outside of a substation come from the power lines entering and leaving the substation. The strength of the EMFs generated by the equipment inside the substation, such as transformers, reactors, and capacitor banks, decreases very rapidly closer to the fence. Beyond the fence, the EMFs produced by the substation equipment are typically indistinguishable from background levels.

The typical voltage for power distribution lines in the project area are from 13 to 25 kV. EMFs directly beneath these overhead distribution lines typically range from 10 to 20 mG for main feeders and less than 10 mG for lateral power lines.

Cumulative Impacts

Under the Action Alternative, TVA would sell at a Section 31 public auction the approximately 1.4 acres of land that would be used by BRMEMC to construct a substation. TVA would also grant BRMEMC a 0.4-acre permanent easement for the construction of a new transmission line and approval of a Section 26a permit for the placement of fill material within the floodplain. TVA has determined that there would be insignificant cumulative impacts associated with the selling of the requested land and granting a permanent easement and approval of a Section 26a permit.

TVA also considered the potential cumulative impacts of the upgraded transmission line in its entirety. The TVA Natural Heritage database indicated that no wetlands, endangered or threatened species, or species of conservation concern would be impacted by the transmission line upgrade. Because the upgraded transmission line would be in either the existing BRMEMC or highway rights-of-way, there would be no or insignificant cumulative impacts to floodplains, recreation, prime farmland, terrestrial ecology, aquatic ecology, water quality, socioeconomics, and navigation. Cumulative impacts to archaeological resources are unknown because the upgraded transmission line right-of-way has not been surveyed for archaeological sites.

The proposed 69-kV transmission line would follow US 76. The land use along this corridor is predominantly commercial. The proposed line would also be constructed along the highway adjacent to land TVA has provided for public recreation use to Georgia Mountain Fair and Towns County through permanent easements. The recreation areas include Towns County Park and Campground, the Georgia Mountain Fairgrounds, and the Towns County Recreation Center. Other land uses along the highway corridor include land TVA made available for the wastewater treatment plant and Towns County Municipal Water Treatment Plant through permanent easements. The proposed 69-kV transmission line would be constructed above the existing 25-kV line and within the existing right-of-way; therefore, no significant impacts to land use along this corridor are expected.

The upgraded transmission line would consist of new metal poles taller than existing wood poles seen in the landscape now. There would be a noticeable change in the landscape due to the increased pole heights and the contrast of materials. The new poles would not

be an increase in the number of discordantly contrasting elements seen in the landscape. However, the new poles would likely be more visible from greater distances, particularly in the middleground (0.5 mile to 4 miles). This would contribute to the cumulative impacts of human alterations in the environment. However, these impacts would not likely be adverse to historic structures since the current visual setting for these structures include the existing transmission line and associated structures.

Commitments

Development Commitments

The following development commitments would be required of the successful bidder for the development on the approximately 1.4-acre portion of Parcel 52. TVA evaluated the proposal to auction this portion of Parcel 52 based on the premise that BRMEMC would develop the property for electric substation purposes.

- The use of the property is limited to one use—electrical power substation only. TVA has the right to reenter and take possession of the property if it is used for any other purpose.
- The grantee must be a public electrical power distributor that services the Towns County, Georgia, area.
- TVA has the right of first refusal to buy back the property at cost plus an annual inflation rate if the successful bidder wishes to sell the property.

Environmental Commitments

Under the Action Alternative, TVA would require BRMEMC to comply with all applicable federal, state, and local regulations. In addition to the use of construction-related BMPs, permit conditions and mitigation measures would be required. The permit conditions are located in Attachment F. The following nonroutine measures would reduce the potential for adverse environmental effects.

- A vegetative screen of mixed evergreen and deciduous shrub species would be planted at a 25-foot-minimum width around all sides of the substation. Shrubs would be 4.5 to 5 feet tall when planted and would have a mature height of 10 to 12 feet. The shrubs would be planted with a maximum spacing of 5 feet between each shrub. The vegetative screen must have a 100 percent survival rate for one year. The shrubs and trees would not be planted within 20 feet of the proposed substation gates.
- All substation, new transmission line, and associated construction lights would be fully shielded or have internal low-glare optics, such that no light would be emitted from the fixture at angles above the horizontal plane.

Preferred Alternative

TVA's preferred alternative is the Action Alternative.

TVA Preparers

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Daniel C. Fisher, Land Use Specialist, Land Use

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Clinton E. Jones, Aquatic Biologist, Aquatic Ecology and Threatened and Endangered Aquatic Species

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Kim Pilarski-Brand, Senior Wetlands Biologist, Wetlands

Edward W. Wells III, Archaeologist, *National Historic Preservation Act* Section 106 Compliance

Agencies and Elected Officials Consulted

Angela Alexander, Georgia Department of Transportation, Office of Transportation Planning

Collis Brown, Georgia Floodplain Management

Commissioner Noel Holcomb, Georgia State Historic Preservation Officer

Barbara Jackson, Georgia State Clearinghouse

Bill Kendall, Towns County Commissioner

Peggy Lovell, Georgia Mountains Regional Development Center

Linda MacGregor, Georgia Department of Natural Resources, Watershed Protection Branch

Elizabeth Shirk, Environmental Review Coordinator, Georgia Historic Preservation Division

Federally Recognized Tribes Consulted

Absentee Shawnee Tribe of Oklahoma
Alabama-Quassarte Tribal Town
Alabama-Coushatta Tribe of Texas
Cherokee Nation
The Chickasaw Nation
Choctaw Nation of Oklahoma
Eastern Band of Cherokee Indians
Eastern Shawnee Tribe of Oklahoma
Jena Band of Choctaw Indians
Kialegee Tribal Town
Muscogee (Creek) Nation of Oklahoma
Seminole Tribe of Florida
Shawnee Tribe
Thlopthlocco Tribal Town
United Keetoowah Band of Cherokee Indians in Oklahoma

Individual Commenters on the Public Notice

Robert B. Blaha, Hiawassee, Georgia
Michael Brock, Towns County Homeowners Association Board, Substation Issue
Committee Chairman
Bob Crawford, Hiawassee, Georgia
Mary Keys, Hiawassee, Georgia
Robert A. Keys, Hiawassee, Georgia
Charles K. Kraus, President, Towns County Homeowners Association
Wes Lerdon, Address Not Given
Hilda T. McGriff, Hiawassee, Georgia
Brenda McKinney, Secretary/Treasurer, Hiawassee Hardware and Building Supply Inc.,
Hiawassee, Georgia
Lamar Paris, Towns County, Georgia
Hilda Thomason, General Manager, Georgia Mountain Fairgrounds
Don Washburn, Young Harris, Georgia

Individual Commenters on the Mountain Reservoirs Land Management Plan With Comments Pertaining to BRMEMC

Kristinia Albach	Craig Evans	Kim Patterson
Andrea Anderson	Mark Fitzgerald	C. Thomas and Shirla Petersen
Brendan and Joan Arnett	Robert E. Garbe	Leonard and Millie Poole
Richard Artmeien	Gerald P. Gutenstein	Kristinia Preye
Richard Artmeier	Will Hearce	Matt and Hava Preye
Cathy Barton	Edward Heddin	Steve Pulley
Elizabeth Bates	Linda Heddin	Terence Radford
Rebecca B. Beal	J.D. Heer	Lynne Reid
Laura Benitez	James Hendry	Johnny Rogers
Don Berry	Shamina Henkel	Mikey Rogers
Katherine Bever	Bill Herald	Michael Rogers
Michael Bever	Gene and Lou Hewatt	Susan Rothblum
Lynne Bever	Chad Hooper	Elizabeth Ruf
May May Bickes	Gene and Fairy Jackson	Joseph Ruf
Thomas Bickes	Dee Dee Jacobs	Larry and Janice Rutledg
R Bickley	Mike Jones	Golda Sanders
Bill Bindewald	Chris Kelley	Barbara Shoak
Richard and Madeline Botting	Angela Kendall	Carl Shultz
Tony Branan	Robert A. Keys	Todd Shutley
Robert N. Brewer	Margaret M. Knight	Joe Spellman
Michael Brock	Gary M. Kopacka	Jeff Stamey
Frances Callen	Becky Landress	Steve and Kathy Stamey
Sara Calvert	Deanna Ledford	Richard Storck
Clint Calvert	Debra LeGere	Marian Summer
Sherry D. Canterbury	Elisabeth and Oskar Letrotsky	Towns County Recreation Staff
Dudley and Peggy Castile	Ben E. and Peggy I. Lilly	Vicki Turner
Sandra Chapin	Richard Ludwig	Todd Turner
Tom Chapin	Steve Massell	Mary Ann Walden
Mattie Chapin	Randy McConnell	Barry and Tricia White
Nancy Church	John McKenney	Paul and Kathy Yellina
William R. Coffman	Mary Lynn Miller	
Michael Crowe	Jack and Mary Miller	
Scott Davis	Carolyn Miller	
Tucker Demuth	Jeanne Minichiello	
DonnaLee Demuth	Robert Moffit	
Ross Demuth	Stephen M. Morris	
Michael Derby	Mary Lynn Mullin	
Ophelia Dickey	Jennifer Myers	
Maria Duben	Helen Neiner	
Jim Duke	Brendan and Joan Neville	
Janet Duke	Gus and Joan Neville	

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Attachments

Attachment A – Application, Proposal Drawings, and Maps

Attachment B – Summary of Public Comments and TVA Responses, Public Notice, Public Comments, and Correspondence

Attachment C – Public Comments Pertaining to BRMEMC Received During the Mountain Reservoirs Land Management Plan Comment Period (August 15-September 29, 2008)

Attachment D – Executive Order 12372, Georgia State Clearinghouse Memorandum, and Georgia Department of Natural Resources Memorandum

Attachment E – CEC 18234

Attachment F – TVA General and Standard Conditions